Claims

- 1. New type of fixed track system for rail traffic, characterised in that it comprises a frame-like structure (2).
- 2. New type of fixed track system for rail traffic according to claim 1, characterised in that the frame-like structure (2) comprises two rail-parallel reinforced concrete prefabricated parts (3).
- 3. New type of fixed track system for rail traffic according to claim 1 or 2, characterised in that preassembled trackway rail carriers of statically delimited length extending parallel to the track are provided.
- 4. New type of fixed track system for rail traffic according to claim 3, characterised in that the trackway rail carriers are supported on reinforced concrete composite piles, which are nailed down underground by high-pressure injections.
- 5. New type of fixed track system for rail traffic according to one of claims 2 to 4, characterised in that the reinforced concrete prefabricated parts (3) in the frame-like assembled and aligned state form a trough provided at an assembly side with a foil as a bottom termination.
- 6. New type of fixed track system for rail traffic according to claim 5, characterised in that the trough is filled with casting concrete and forms a longitudinally and transversely reinforced, joint-free, continuous plate as an upper railway.
- 7. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the reinforced concrete prefabricated parts (3) for the loads in the final state are manufactured pre-curved counter to the load (camber).
- 8. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the parallel-running reinforced concrete prefabricated parts (3) are the

sleeper body.

- 9. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the sleeper bodies in the form of reinforced concrete prefabricated parts (3) are held apart in the assembled state by steel structures (4, 10).
- 10. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the sleeper bodies in the form of reinforced concrete prefabricated parts (3) are secured in position in the installed state by steel structures (4, 10).
- 11. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the final fixing of the longitudinal sleeper unit (2) is achieved by filling the space between sleepers to a defined height with casting concrete (7) of an adequate ultimate strength.
- 12. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that for packing a high-early-strength casting concrete (7) of an adequate ultimate strength is used.
- 13. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the casting concrete (7) is provided with an adequately dimensioned reinforcing steel insert (9).
- 14. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that fastening profiles (16) incorporated in the factory into the prefabricated part of the sleeper body (3) enable easy fastening of additional parts such as e.g. noise protection systems in the wheel region or additional systems such as points.
- 15. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the surface of the space packed with casting concrete (7) is constructed with an adequate slope to allow surface water to drain away.

- 16. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that as a possible upper layer a noise-absorbing concrete layer is applied onto the casting concrete body (7).
- 17. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the casting concrete body (7) is sealed off in a downward direction from the frost protection lever (1) by means of a PE foil (5) of adequate strength.
- 18. New type of fixed track system for fail traffic according to claim 1 and following, characterised in that the PE foil (5) acting as a seal against rising damp is connected imperviously to the sleeper bodies (3).
- 19. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that water is removed from the surface of the casting concrete body (7) situated between the reinforced concrete sleeper bodies (3) by means of a drainage system (8), which is integrated in the factory into the prefabricated part.
- 20. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the longitudinal sleeper unit (2) as vertical and horizontal fixing is anchored on reinforced concrete piles (11, 12), which are nailed down underground by high-pressure injections, and steel supports (13).
- 21. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the longitudinal sleeper unit (2) as vertical and horizontal fixing is anchored on steel piles (11, 12), which are nailed down underground by high-pressure injections, and steel supports (13).
- 22. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the anchors (11, 12, 13) in terms of their anchoring direction are orientated to the principal loading directions.

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- 23. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the adjustment of the sleeper body (3) need be effected only at the support points at greater intervals along the foundation work (11, 12, 13).
- 24. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the rail (14) is mounted by means of the conventional standard connecting means (15) on the new type of sleeper bodies (3) and anchored in a laterally displaceable manner in the fastening profiles (16), which are embedded in concrete transversely of the rail position in the rail fastening spacing.
- 25. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the rail body (14) rests on a ribbed plate (15).
- 26. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the rail inclination is freely adjustable by means of the ribbed plate (15).
- 27. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the rail body (14) is laterally displaceable on the ribbed plate (15) in the released state of the fastening means (15).
- 28. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that the rail (14) is acoustically isolated from the substructure (1) by means of a sound deadening mat (6) laid therebetween.
- 29. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that an adaptation to different gauges entails merely the appropriate variation of the steel structures (4, 10) but no variation of the reinforced concrete beam (3).
- 30. New type of fixed track system for rail traffic according to claim 1 and following, characterised in that in the sleeper bodies (3) in the upper region transversely of the rail position are horizontal cylindrical openings, which have previously been left open during concreting and recur at regular intervals and also allow the subsequent installation of a point

mechanism.

31. Method of manufacturing a new type of fixed track system for rail traffic according to one of the preceding claims.

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